

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (canceled).

1 Claim 2 (previously presented): The method of claim 4
2 wherein the selected set of configuration information for a
3 data forwarding device is a most recently committed set of
4 configuration information for the data forwarding device.

1 Claim 3 (previously presented): The method of claim 4
2 wherein the selected set of configuration information for a
3 data forwarding device is selected by a user.

1 Claim 4 (previously presented): A method comprising:
2 a) accepting at least a part of a selected set of
3 configuration information for a data forwarding
4 device;
5 b) accepting at least a part of a set of candidate
6 configuration information for the data forwarding
7 device; and
8 c) determining differences, if any, between
9 - the at least a part of the set of candidate
10 configuration information for the data forwarding
11 device, and
12 - the at least a part of the selected set of
13 configuration information for the data forwarding
14 device,
15 wherein the set of candidate configuration
16 information for the data forwarding device includes a
17 plurality of statements,

18 wherein a first statement of the plurality of
19 statements of the set of candidate configuration
20 information for the data forwarding device contains a
21 second statement of the plurality of statements to define
22 at least a part of a hierarchical configuration,
23 wherein the selected set of configuration
24 information for the data forwarding device includes a
25 plurality of statements, and
26 wherein a first statement of the plurality of
27 statements of the selected set of configuration information
28 for the data forwarding device contains a second statement
29 of the plurality of statements to define at least a part of
30 a hierarchical configuration.

1 Claim 5 (previously presented): The method of claim 4
2 wherein the at least the part of the set of candidate
3 configuration information only includes a defined first
4 statement and any of the plurality of statements that are
5 descendants of the defined first statement in the
6 hierarchical configuration, and
7 wherein the at least the part of the selected set
8 of configuration information includes a corresponding first
9 statement and any of the plurality of statements that are
10 descendants of the defined first statement in the
11 hierarchical configuration.

1 Claim 6 (original): The method of claim 5 wherein the
2 defined first statement is defined based on a statement of
3 the hierarchical candidate configuration information on
4 which a user is presently working.

1 Claim 7 (original): The method of claim 5 wherein the
2 defined first statement is defined by a user input.

1 Claim 8 (original): The method of claim 4 wherein the
2 hierarchical configuration information includes at least
3 two categories at a first hierarchical level, and
4 wherein the at least two categories are selected
5 from a group of data forwarding device configuration
6 categories consisting of:

- 7 A) chassis configuration information;
- 8 B) class-of-service configuration information;
- 9 C) firewall configuration information;
- 10 D) forwarding-options configuration information;
- 11 E) groups configuration information;
- 12 F) interfaces configuration information;
- 13 G) policy-options configuration information;
- 14 H) protocols configuration information;
- 15 I) routing-instances configuration information;
- 16 J) routing-options configuration information;
- 17 K) network management protocol configuration
18 information; and
- 19 L) system configuration information.

1 Claim 9 (original): The method of claim 4 wherein the
2 hierarchical configuration information includes at least
3 two categories at a given hierarchical level, the method
4 further comprising:
5 d) associating a predetermined permission value with
6 a user that is logged in; and
7 e) determining whether the logged in user is
8 permitted to access one of the at least two categories

9 of configuration information based on the
10 predetermined permission.

1 Claim 10 (previously presented): A method comprising:
2 a) accepting at least a part of a selected set of
3 configuration information for a data forwarding
4 device;
5 b) accepting at least a part of a set of candidate
6 configuration information for the data forwarding
7 device; and
8 c) determining differences, if any, between
9 - the at least a part of the set of candidate
10 configuration information for the data forwarding
11 device, and
12 - the at least a part of the selected set of
13 configuration information for the data forwarding
14 device,
15 wherein the act of accepting at least a part of a
16 selected set of configuration information for a data
17 forwarding device is performed by accessing a storage
18 device of the data forwarding device,
19 wherein the act of accepting at least a part of a
20 set of candidate configuration information for the data
21 forwarding device is performed by accessing a storage
22 device of the data forwarding device; and
23 wherein the act of determining differences, if
24 any, between
25 - the at least the part of the set of candidate
26 configuration information for the data forwarding
27 device, and

28 - the at least the part of the selected set of
29 configuration information for the data forwarding
30 device,
31 is performed by a component of the data forwarding device.

1 Claim 11 (previously presented): A method comprising:
2 a) accepting at least a part of a selected set of
3 configuration information for a data forwarding
4 device;
5 b) accepting at least a part of a set of candidate
6 configuration information for the data forwarding
7 device; and
8 c) determining differences, if any, between
9 - the at least a part of the set of candidate
10 configuration information for the data forwarding
11 device, and
12 - the at least a part of the selected set of
13 configuration information for the data forwarding
14 device,
15 wherein the set of candidate configuration
16 information for the data forwarding device includes a
17 plurality of statements,
18 wherein the selected set of configuration
19 information for the data forwarding device includes a
20 plurality of statements, and
21 wherein the act of determining differences, if
22 any, between
23 - the at least a part of the set of
24 candidate configuration information for the
25 data forwarding device, and

26 - the at least a part of the selected set
27 of configuration information for the data
28 forwarding device,
29 considers changes to statements without regard to parameter
30 values.

Claim 12 (canceled)

1 Claim 13 (original): In a data forwarding device, a
2 facility for checking at least a part of a set of candidate
3 configuration information, the facility comprising:
4 a) a storage device for storing at least one set of
5 configuration information for the data forwarding
6 device;
7 b) an input facility for
8 i) accepting at least a part of a selected one
9 of the at least one set of configuration
10 information for a data forwarding device, and
11 ii) accepting at least a part of a set of
12 candidate configuration information for the data
13 forwarding device; and
14 c) a configuration comparison facility for
15 determining differences, if any, between
16 - the at least a ~~the~~ part of the set of
17 candidate configuration information for the data
18 forwarding device, and
19 - the at least a ~~the~~ part of the selected one of
20 the at least one set of configuration information
21 for the data forwarding device.

1 Claim 14 (previously presented): A method for determining
2 differences in at least a part of sets of configuration
3 information, comprising:

4 a) accepting at least a part of a first set of
5 configuration information for a data forwarding
6 device, wherein the first set of configuration
7 information has not been saved on the data forwarding
8 device as a committed configuration;

9 b) accepting at least a part of a second set of
10 configuration information for the data forwarding
11 device, wherein the second set of configuration
12 information has been saved on the data forwarding
13 device; and

14 c) determining differences, if any, between
15 - the first set of configuration information for
16 a data forwarding device, and
17 - the second set of configuration information
18 for a data forwarding device.

1 Claim 15 (previously presented): The method of claim 14
2 wherein the first set of configuration information for a
3 data forwarding device includes a plurality of statements,
4 wherein a first statement of the plurality of
5 statements of the first set of configuration information
6 for a data forwarding device contains a second statement of
7 the plurality of statements to define at least a part of a
8 hierarchical configuration,

9 wherein the second set of configuration
10 information for a data forwarding device includes a
11 plurality of statements, and

12 wherein a first statement of the plurality of
13 statements of the second set of configuration information

14 for a data forwarding device contains a second statement of
15 the plurality of statements to define at least a part of a
16 hierarchical configuration.

1 Claim 16 (previously presented): The method of claim 15
2 wherein the at least the part of the first set of
3 configuration information for a data forwarding device only
4 includes a defined first statement and any of the plurality
5 of statements that are descendants of the defined first
6 statement in the hierarchical configuration, and
7 wherein the at least the part of the second set
8 of configuration information for a data forwarding device
9 includes a corresponding first statement and any of the
10 plurality of statements that are descendants of the defined
11 first statement in the hierarchical configuration.

1 Claim 17 (original): The method of claim 16 wherein the
2 defined first statement is defined by a user input.

1 Claim 18 (original): The method of claim 15 wherein the
2 hierarchical configuration information includes at least
3 two categories at a first hierarchical level, and
4 wherein the at least two categories are selected
5 from a group of data forwarding device configuration
6 categories consisting of:
7 A) chassis configuration information;
8 B) class-of-service configuration information;
9 C) firewall configuration information;
10 D) forwarding-options configuration information;
11 E) groups configuration information;
12 F) interfaces configuration information;
13 G) policy-options configuration information;

14 H) protocols configuration information;
15 I) routing-instances configuration information;
16 J) routing-options configuration information;
17 K) network management protocol configuration
18 information; and
19 L) system configuration information.

1 Claim 19 (previously presented): The method of claim 14
2 wherein the act of accepting at least a part of the first
3 set of configuration information for the data forwarding
4 device is performed by accessing a storage device of the
5 data forwarding device,
6 wherein the act of accepting at least a part of
7 the second set of configuration information for the data
8 forwarding device is performed by accessing a storage
9 device of the data forwarding device, and
10 wherein the act of determining differences, if
11 any, between
12 - the first set of configuration
13 information for the data forwarding device,
14 and
15 - the second set of configuration
16 information for the data forwarding device,
17 is performed by a component of the data forwarding device.

1 Claim 20 (previously presented): The method of claim 14
2 wherein the first set of configuration information for a
3 data forwarding device includes a plurality of statements,
4 at least some of which define parameter values,
5 wherein the second set of configuration
6 information for the data forwarding device includes a

7 plurality of statements, at least some of which define
8 parameter values, and
9 wherein the act of determining differences, if
10 any, between
11 - the first set of configuration
12 information for the data forwarding device,
13 and
14 - the second set of configuration
15 information for the data forwarding device,
16 considers a selected one of (a) statements only, (b)
17 parameter values only, and (c) statements and parameter
18 values.

Claim 21 (cancelled)

1 Claim 22 (original): In a data forwarding device, a
2 facility for comparing at least a part of sets of
3 configuration information, the facility comprising:
4 a) a storage device for storing at least two sets of
5 configuration information for the data forwarding
6 device;
7 b) an input facility for
8 i) accepting at least a part of a first selected
9 one of the at least two sets of configuration
10 information for the data forwarding device, and
11 ii) accepting at least a part of a second
12 selected one of the at least two sets of
13 configuration information for the data forwarding
14 device; and
15 c) a configuration comparison facility for
16 determining differences, if any, between

17 - the first selected one of the at least two
18 sets of configuration information for the data
19 forwarding device, and
20 - the second selected one of the at least two
21 sets of configuration information for the data
22 forwarding device.

1 Claim 23 (previously presented): A method comprising:
2 receiving with a data forwarding device, a first set
3 of configuration information for the data forwarding
4 device, wherein the first set of configuration information
5 has not yet been committed on the data forwarding device;
6 receiving with the data forwarding device, a second
7 set of configuration information for the data forwarding
8 device;
9 determining with the data forwarding device,
10 differences between the first and second sets of
11 configuration information.

1 Claim 24 (original): The method according to claim 23,
2 wherein the data forwarding device is a router.

1 Claim 25 (previously presented): A data forwarding device
2 comprising:
3 a memory storing a first set of configuration
4 information and a second set of configuration information
5 for the data forwarding device; and
6 a processing module for determining differences
7 between the first and second sets of configuration
8 information stored in the memory.

1 Claim 26 (previously presented): A data forwarding device
2 comprising:
3 a plurality of data interfaces for connection to
4 respective data lines;
5 a mechanism for forwarding data from one data
6 interface to another data interface;
7 a user interface for entering configuration
8 information;
9 a memory storing a first set of configuration
10 information and a second set of configuration information;
11 and
12 a processing module for determining differences
13 between the first and second sets of configuration
14 information stored in the memory.

1 Claim 27 (previously presented): The method of claim 10
2 wherein the selected set of configuration information for a
3 data forwarding device is a most recently committed set of
4 configuration information for the data forwarding device.

1 Claim 28 (previously presented): The method of claim 10
2 wherein the selected set of configuration information for a
3 data forwarding device is selected by a user.

1 Claim 29 (previously presented): The method of claim 11
2 wherein the selected set of configuration information for a
3 data forwarding device is a most recently committed set of
4 configuration information for the data forwarding device.

1 Claim 30 (previously presented): The method of claim 11
2 wherein the selected set of configuration information for a
3 data forwarding device is selected by a user.

1 Claim 31 (previously presented): The method of claim 14
2 wherein a command to save the first set of configuration
3 information on the data forwarding device as a committed
4 configuration has not occurred.

1 Claim 32 (new): The method of claim 14 wherein the first
2 set of configuration information is from an uncommitted
3 candidate configuration, and
4 wherein the second set of configuration information is
5 from a configuration that has been saved on the data
6 forwarding device as a committed configuration.

1 Claim 33 (new): The method of claim 10 wherein the
2 candidate set of configuration information is an
3 uncommitted candidate configuration, and
4 wherein the selected set of configuration information
5 is a configuration that has been saved on the data
6 forwarding device as a committed configuration.